

Vaccine Candidates Against Johne's Disease



INVENTORS • Adel Talaat

WARF: P05446US

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The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in developing potential vaccine candidates for Johne's disease.

OVERVIEW

Johne's disease is a contagious, chronic and usually fatal wasting disease that primarily affects the small intestine of ruminants. It is a worldwide problem with no known treatment and infects 25 to 50 percent of dairy cattle in the United States. Although a vaccine for Johne's disease exists, it does not protect against severe infection or transmission of the disease.

THE INVENTION

A UW-Madison researcher has developed potential vaccine candidates for Johne's disease. The disease is caused by the slow-growing bacterium *Mycobacterium avium* subspecies *paratuberculosis*, or *M. paratuberculosis*. The inventor identified several *Mycobacterium* strain-specific genes that may contribute to the pathogenicity of *M. paratuberculosis*. These genes could be used to design vaccines against pathogenic subspecies of *M. avium*, including *M. paratuberculosis*. In a recent study, vaccine preparations based on these sequences helped protect rodents against infection with *M. paratuberculosis*.

APPLICATIONS

- Prevention and treatment of Johne's disease

KEY BENEFITS

- May enable the development of improved vaccines for Johne's disease
- May lead to methods for preventing and treating Johne's disease in ruminants and Crohn's disease in humans, which may be linked to Johne's disease

THE WARF ADVANTAGE

Since its founding in 1925 as the patenting and licensing organization for the University of Wisconsin-Madison, WARF has been working with business and industry to transform university research into products that benefit society. WARF intellectual property managers and licensing staff members are leaders in the field of university-based technology transfer. They are familiar with the intricacies of patenting, have worked with researchers in relevant disciplines, understand industries and markets, and have negotiated innovative licensing strategies to meet the individual needs of business clients.



ADDITIONAL INFORMATION

Tech Fields

Veterinary - Livestock
Agriculture - Animal health
Drug Discovery - Targets

CONTACT INFORMATION

For current licensing status, please contact Emily Bauer at emily@warf.org or 608-960-9842.

